

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 1, 2, 4, 7, 11-15, 17, 20, 24-28, 30, 33 and 37-41 are currently amended.

1. (Currently Amended) A method for supporting telephony services over a data network, the method comprising:

retrieving message waiting indication information from a plurality of voice mail ~~system~~ systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail message for the user;

determining an instant communication client of the user; and

forwarding the message waiting indication information over the data network to the instant communication client for display.

2. (Currently Amended) A method according to claim 1, ~~wherein the voice mail system is among a plurality of voice mail systems associated with the user, the method further comprising:~~
~~receiving another message waiting indication information associated with a different one of the voice mail systems; and~~
~~forwarding the other message waiting indication information to the instant communication client,~~ wherein the instant communication client displays the plurality of message waiting indication information concurrently.

3. (Original) A method according to claim 1, wherein the instant communication client is among a plurality of instant communication clients, the method further comprising:

forwarding the message waiting indication information to one or more of the instant communication clients.

4. (Currently Amended) A method according to claim 1, further comprising:

accessing a user database for a profile of the user, wherein the profile specifies the voice mail ~~system~~ systems and the instant communication client for displaying the message waiting indication information.

5. (Original) A method according to claim 4, further comprising:

receiving a request to modify the profile of the user; and
modifying the profile based on the request.

6. (Original) A method according to claim 1, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.

7. (Currently Amended) A method according to claim 1, the method further comprising:

receiving an identifier associated with a called station served by one of the voice mail ~~system~~ systems; and
forwarding the identifier to the instant communication client, wherein the instant communication client displays the identifier along with the message waiting indication information.

8. (Original) A method according to claim 7, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).

9. (Original) A method according to claim 1, the method further comprising:
determining whether the instant communication client is available; and
if the instant communication client is not available, storing the message waiting indication information for later delivery.

10. (Original) A method according to claim 1, the method further comprising:
appending supplemental information including one of time stamp information and advertisement information to the message waiting indication information.

11. (Currently Amended) A method according to claim 1, the method further comprising:
associating a user with ~~one or more~~ the voice mail systems; and
associating the user with one or more instant communication clients including the instant communication client.

12. (Currently Amended) A method according to claim 1, the method further comprising:
generating a command message to one of the voice mail ~~system~~ systems to activate or deactivate message waiting indication function of the one voice mail system.

13. (Currently Amended) A method according to claim 1, the method further comprising:

generating a voice mail indicator message to notify a computing system hosting the instant communication client or an intermediate system, wherein the voice mail indicator message includes an identification field for the instant communication client and one or more fields indicating presence of voicemail in the respective voice mail systems.

14. (Currently Amended) A computer-readable medium carrying one or more sequences of one or more instructions for supporting telephony services over a data network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

retrieving message waiting indication information from a plurality of voice mail ~~system~~ systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail message for the user;

determining an instant communication client of the user; and

forwarding the message waiting indication information over the data network to the instant communication client for display.

15. (Currently Amended) A computer-readable medium according to claim 14, ~~wherein the voice mail system is among a plurality of voice mail systems associated with the user, the computer readable medium further including instructions for causing the one or more processors to perform the steps of:~~

~~receiving another message waiting indication information associated with a different one of the voice mail systems; and~~

~~forwarding the other message waiting indication information to the instant communication client~~, wherein the instant communication client displays the plurality of message waiting indication information concurrently.

16. (Original) A computer-readable medium according to claim 14, wherein the instant communication client is among a plurality of instant communication clients, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

forwarding the message waiting indication information to one or more of the instant communication clients.

17. (Currently Amended) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

accessing a user database for a profile of the user, wherein the profile specifies the voice mail ~~system~~ systems and the instant communication client for displaying the message waiting indication information.

18. (Original) A computer-readable medium according to claim 17, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

receiving a request to modify the profile of the user; and
modifying the profile based on the request.

19. (Original) A computer-readable medium according to claim 14, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.

20. (Currently Amended) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

receiving an identifier associated with a called station served by one of the voice mail ~~system~~
systems; and

forwarding the identifier to the instant communication client, wherein the instant communication client displays the identifier along with the message waiting indication information.

21. (Original) A computer-readable medium according to claim 20, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).

22. (Original) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

determining whether the instant communication client is available; and

if the instant communication client is not available, storing the message waiting indication information for later delivery.

23. (Original) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

appending supplemental information including one of time stamp information and advertisement information to the message waiting indication information.

24. (Currently Amended) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

associating a user with ~~one or more~~ the voice mail systems; and

associating the user with one or more instant communication clients including the instant communication client.

25. (Currently Amended) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

generating a command message to one of the voice mail ~~system~~ systems to activate or deactivate message waiting indication function of the one voice mail system.

26. (Currently Amended) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

generating a voice mail indicator message to notify a computing system hosting the instant communication client or an intermediate system, wherein the voice mail indicator

message includes an identification field for the instant communication client and one or more fields indicating presence of voicemail in the respective voice mail systems.

27. (Currently Amended) A system for supporting telephony services over a data network, the system comprising:

a gateway configured to retrieve message waiting indication information from a plurality of voice mail ~~system~~ systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail message for the user, the gateway determining an instant communication client of the user; and

a server configured to forward the message waiting indication information over the data network to the instant communication client for display.

28. (Currently Amended) A system according to claim 27, ~~wherein the voice mail system is among a plurality of voice mail systems associated with the user, the gateway being further configured to receive another message waiting indication information associated with a different one of the voice mail systems, the server forwarding the other message waiting indication information to the instant communication client,~~ wherein the instant communication client displays the plurality of message waiting indication information concurrently.

29. (Original) A system according to claim 27, wherein the instant communication client is among a plurality of instant communication clients, the message waiting indication information being forwarded to one or more of the instant communication clients.

30. (Currently Amended) A system according to claim 27, further comprising:
a user database for storing a profile of the user, wherein the profile specifies the voice mail ~~system~~ systems and the instant communication client for displaying the message waiting indication information.
31. (Original) A system according to claim 30, wherein the server receives a request to modify the profile of the user, and the profile is modified based on the request.
32. (Original) A system according to claim 27, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.
33. (Currently Amended) A system according to claim 27, wherein the gateway receives an identifier associated with a called station served by one of the voice mail ~~system~~ systems, the identifier being forwarded to the instant communication client which displays the identifier along with the message waiting indication information.
34. (Original) A system according to claim 33, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).
35. (Original) A system according to claim 27, wherein the gateway determines whether the instant communication client is available, and if the instant communication client is not available, the gateway stores the message waiting indication information for later delivery.

36. (Original) A system according to claim 27, wherein the gateway appends supplemental information including one of time stamp information and advertisement information to the message waiting indication information.

37. (Currently Amended) A system according to claim 27, wherein a user is ~~associated with one or more voice mail systems, and the user is~~ associated with one or more instant communication clients.

38. (Currently Amended) A system according to claim 27, wherein the gateway is further configured to generate a command message to one of the voice mail ~~system~~ systems to activate or deactivate message waiting indication function of the one voice mail system.

39. (Currently Amended) A system according to claim 27, wherein the gateway is further configured to generate a voice mail indicator message to notify a computing system hosting the instant communication client or the server, wherein the voice mail indicator message includes an identification field for the instant communication client and one or more fields indicating presence of voicemail in the respective voice mail systems.

40. (Currently Amended) A method for supporting telephony services over a data network, the method comprising:

aggregating message waiting indication information from ~~one or more~~ a plurality of voice mail systems for notifying a user of presence of a voice mail message resident on any one of the voice mail systems; and

transmitting a notification message over the data network to an instant communication client based upon the aggregated message waiting indication information, wherein the notification message specifies the presence of the voice mail message.

41. (Currently Amended) A server for supporting telephony services over a data network, the method comprising:

means for aggregating message waiting indication information from ~~one or more~~ a plurality of voice mail systems for notifying a user of presence of a voice mail message resident on any one of the voice mail systems; and

means for transmitting a notification message over the data network to an instant communication client based upon the aggregated message waiting indication information, wherein the notification message specifies the presence of the voice mail message.